

1 1. A method comprising:
2 clamping a heat sink to a thermoelectric cooler
3 over a vapor chamber using a clamp that extends at least
4 partially around said thermoelectric cooler and vapor
5 chamber over the top of said heat sink.

1 2. The method of claim 1 including clamping a heat
2 sink using a U-shaped member which clamps to a plate
3 underneath the heat sink and extends around and over the
4 heat sink from side to side.

1 3. The method of claim 2 including providing
2 adjustable threaded members on the free ends of said U-
3 shaped heat sink.

1 4. The method of claim 1 including providing a
2 reinforcement over the top of the heat sink to underlie the
3 clamp.

1 5. The method of claim 1 including providing a stack
2 of said heat sink, a heat spreader, a thermoelectric
3 cooler, and a vapor chamber.

1 6. The method of claim 5 including providing a
2 support frame underneath said vapor chamber.

1 7. The method of claim 6 including clamping a U-
2 shaped clamp on the underside of said support frame.

1 8. The method of claim 7 including causing said
2 clamp to extend from the underside of said support frame,
3 around the side of said heat sink, over said heat sink,
4 down the opposite side of said heat sink, and under said
5 support frame on the opposite side.

1 9. The method of claim 8 including providing an
2 adjustment means at the interface between said clamp and
3 said support frame.

1 10. The method of claim 9 including providing a clamp
2 with a connecting portion and a pair of transversely
3 extending arms, said connecting portion being bowed and
4 said arm being resilient.

1 11. The method of claim 10 including arranging said
2 connecting portion to press against the upper surface of
3 said heat sink when said transversely extending arms are
4 clamped underneath said heat sink to provide a spring
5 biased compression between said clamp and said heat sink.

1 12. The method of claim 1 including securing said
2 clamp on fins extending from said heat sink.

1 13. A clamp comprising:
2 a bowed leaf spring connecting portion; and
3 a pair of transversely extending arms extending
4 from opposed ends of said portion, said arms to wrap around
5 a vapor chamber, a thermoelectric cooler, and a heat sink
6 to secure said heat sink to said thermoelectric cooler and
7 vapor chamber.

1 14. The clamp of claim 13 including an adjustment
2 element on the free ends of said arms.

1 15. The clamp of claim 14 wherein said adjustment
2 element includes a threaded member.

1 16. The clamp of claim 13 wherein said portion bows
2 toward said arms.

1 17. A cooling assembly comprising:
2 a heat sink having fins;
3 a vapor chamber;
4 a thermoelectric cooler; and
5 a U-shaped clamp extending over said fins and
6 under said vapor chamber and thermoelectric cooler to clamp
7 said vapor chamber and cooler to said heat sink.

1 18. The assembly of claim 17 including a strip
2 extending over said fins, and under said U-shaped clamp.

1 19. The assembly of claim 17 wherein said clamp
2 includes a bowed leaf spring connecting portion and a pair
3 of transversely extending arms extending from opposed ends
4 of said portion.

1 20. The assembly of claim 19 including threaded
2 members on the free ends of said arms.

1 21. The assembly of claim 17 including a vapor
2 chamber coupled to said cooler.

1 22. The assembly of claim 21 including a vapor
2 chamber support frame coupled to said vapor chamber.

1 23. The assembly of claim 17 wherein said U-shaped
2 clamp includes a bowed portion extending over said fins,
3 said bowed portion being resilient.

1 24. The assembly of claim 17 including a vapor
2 chamber and a vapor chamber frame, said U-shaped clamp
3 extending over said fins, said cooler, said vapor chamber,
4 a thermoelectric cooler, and abutting against said vapor
5 chamber support frame.